# United States of America

Fair Shares Nationally Determined Contribution (NDC)

A civil society model document for the US climate action pledge submission to the United Nations Framework Convention on Climate Change under the Paris Agreement

September 2024

# The US Fair Share NDC at a Glance

The US Fair Share Nationally Determined Contribution (NDC) for 2035 outlines a comprehensive plan for the United States to significantly reduce greenhouse gas emissions and enhance climate action in an equitable way both domestically and internationally. The US Fair Share NDC is based on principles of climate justice and the acknowledgment that, as the largest historical emitter and today's largest fossil fuel producer with plans for endless expansion, the US has not sufficiently contributed to global climate efforts in line with its capabilities and responsibilities.[i]

Existing actions and commitments made by the US have failed to deliver what is necessary to address the scale of the climate crisis.[ii] Therefore, the Fair Share approach is designed to recalibrate the US' climate commitments to address previous shortcomings by ensuring that the US' contributions are both equitable and commensurate with its historical emissions, present-day fossil fuel production, and unparalleled economic capabilities. To reflect the United States' commitment to the United Nations Framework Convention on Climate Change (UNFCCC) and, more specifically, the Paris Agreement, the outlined Fair Share NDC includes ambitious goals for mitigation, adaptation, and loss and damage. Calculations are based on the methodology of the Civil Society Equity Review, a decade-long collaboration among UNFCCC constituencies to transparently determine each country's equitable contribution.

To prevent average global temperatures from surpassing 1.5°C warming above the 19th century benchmark, the US' fair share of the 2035 global mitigation effort is equivalent to emissions reductions of 203% below 2005 levels, or approximately 14 billion metric tons of carbon dioxide equivalents ($CO_2$eq). Thus, the US will cut its domestic emissions by 80% from 2005 levels by 2035 (6 billion metric tons).[iii] This leaves 8 billion metric tonnes that must still be reduced. Therefore, the US will need to provide developing nations finance and technology (without any offsets), to achieve deeper emissions cuts than they would be able to reach without international support. In other words, international climate finance is as important as reducing domestic emissions since the total amount of reductions is twice what the US currently produces. The US Fair Share is also designed to support developing nations' response to climate change with adaptation and loss and damage strategies with the help of climate finance.

*Getting to 80% Reductions by 2035 in the US*

This US Fair Share NDC outlines policy measures that are critical to achieve these ambitious emissions reductions in the US and provide support for other countries' just transitions. The NDC development process requires the White House to consult with communities around the country to deliver on what is needed, and to create a pathway for collective success. It will take local, state, tribal, and federal action to reach these goals. Below are the suggested US mitigation measures outlined in the US Fair Share NDC:

- As today's top oil and gas producer, the US will be the first and fastest to phase-out fossil fuel extraction. Expansion will end immediately, with the current pause on LNG export permits made permanent. Exports will be eliminated and regulations fully enforced in cooperation with other major producers to ensure price stability. This phase-out will be fast, full, fair, feminist, and funded. All coal production will end in 2030. Oil and gas production will end in 2031 for a 66% chance of limiting global warming to 1.5°C. All fossil fuel subsidies will end by 2025 to incentivize the phase-out.[iv]

- The US will transition to 100% clean and renewable electric power generation and distribution infrastructure by 2030, in coordination with fossil fuel phase-out targets and timelines.
- The US military will begin to measure its emissions, report those emissions to the public, and add them to the overall total of US emissions that will be decreased with this NDC.
- The US will build out high speed rail to all major cities by 2030, and will end new sales of Internal Combustion Engine vehicles by 2035.
- Industries such as chemical production or steel manufacturing will reach 80% emissions reductions by 2035, requiring increased efficiency, electrification, and ending fossil fuels on production sites.
- Emissions from buildings, construction and operations will be eliminated by 2035 by electrifying buildings, using low carbon materials, and ensuring intact ecosystems and carbon sinks in the built environment during construction.
- The US will develop a National Zero Waste Plan by 2026, creating a circular economy, and minimizing what ends up in landfills with composting and enhanced recycling efforts.
- Single-use plastics will be banned in the US by 2031, and virgin plastic production will be banned by 2034.
- Subsidies will be shifted from large factory farms to smaller farms by 2030, and Concentrated Animal Feeding Operations (CAFOs) will be phased out by 2035. The US will also focus on restoration of farm land not in use to its original landscape. Emission reductions in agriculture will be decreased by at least 50% by 2030.
- Federal forested land, especially old growth forests, will be protected and enhanced through the acquisition of private or state held forested lands. Agriculture waste will be incorporated into products that use forest products to limit the demand for forest products. Forest harvesting will not be used to support biomass energy domestically or internationally.
- The US commits to protecting 30% of ocean territory under the US control by 2030 due to the importance of these ecosystems for local communities, biodiversity protection, and as a climate sink.
- Create a plan by 2028 to reduce methane from fossil fuel production and reservoirs in the US.

*Domestic and International Climate Finance*

Delivering finance domestically and internationally will be indispensable to meeting the necessary climate targets to stay below 1.5°C threshold.

- To achieve domestic emission reductions of 80% by 2035, a very significant effort will be required. Entire systems will need to be transformed, and it will require labor, materials, and programs to support communities making these changes. The US will raise public funding for both domestic and international climate finance.
- As an extremely wealthy, high-capacity country that has produced a quarter of humanity's total historical emissions,[v] the US will contribute $446 billion per year in grant or grant equivalent finance to the collective effort, to cover mitigation, adaptation, and loss and damage.[vi]

It is important to note that developed countries can raise trillions in hard currencies for climate and other finance needs by shifting public money away from subsidizing fossil fuel extraction and other climate harmful activities, making rich polluters pay, and transforming the existing financial system. Whatever finance sources are tapped, their incidence must be just, so that the burden does not fall on low-income and low middle-income Americans.

*Domestic Adaptation and Loss and Damage*

The US will develop a National Adaptation Plan and a National Loss and Damage Plan in consultation with frontline communities by 2027. These plans will enhance protective response measures to climate impacts, focusing on communities at risk of climate harm, and integrating climate resilient criteria into decision making for all sectors.

*Transparency*

The Fair Share NDC calls for an annual assessment completed by the EPA outlining progress and challenges in reaching NDC goals that will be posted publicly by the US government, and agencies will use this guidance to adjust their practices in the next year.

*Why this document?*

During the first year of the Biden Administration, the US released an updated NDC for 2030 that set the target to reduce emissions by 50-52% from 2005 levels and a climate finance pledge of $11.4 billion per year by 2024.[vii] While it signaled an intent for increased ambition, the 2021 US NDC fell short of doing its fair share, which is nearer to 70% emission reductions by 2030 and many times that in climate finance.[viii] In an NDC analysis of the 20 largest economies, the US NDC had the greatest gap between its emissions reductions and what would be needed to achieve its fair share.[ix] Despite the recent passage of the historic Inflation Reduction Act and the Bipartisan Infrastructure Act, the US is not even on track to meet these insufficient emissions reduction targets.[x] In fact, emissions resulting from the Biden administration's fossil fuel project approvals are greater than the emissions reductions from the Inflation Reduction Act and other climate policies.[xi] Further, climate finance has been meager and has not materialized as promised. What's more, most of the US climate finance has been loan-based and does not include any new or additional public funding, leaving developing countries with more debt to address a problem they did not create, but need to address immediately.[xii]

The next US NDC must go beyond business as usual if the world is going to have any chance of meeting the Paris Agreement targets, especially staying below the 1.5°C threshold. The Fair Share NDC presented below delivers what is needed by the United States at this time. As civil society organizations throughout the US, we are calling on the US to put forward a true Fair Share NDC. Doing so is a moral obligation and is necessary to unlock the global ambition needed to address the climate crisis.

# Fair Share NDC Contributors

Progressive international policy organizations from throughout the United States have been developing this Fair Share NDC, to articulate what is needed to combat the climate crisis. The Fair Share NDC reflects what the progressive climate movement would like to see put forth in the NDC submitted by the United States Government in the next year. These organizations are part of Demand Climate Justice, the US Climate Action Network, Care About Climate, the Youth Climate Policy Council, the Wisdom Keepers Indigenous Delegation and other networks advocating for proactive climate policy throughout the United States.

Authors: Natalie Lucas, Tom Athanasiou, Kelly Stone, Karuna Jaggar, Isatis Cintron, Jessica Olson, Victor Menotti, Ceecee Holz, Hailey Campbell, Jacob Johns, Daphne Wysham

Commenters - Almy Bartis, Ashfaq Khalfan, Mara Dolan, Jason Rylander, Rachel Ruback, Tara Daniel, Jean Su, Rev. Michael Malcom, Steve Suppan, Basav Sen, Ben Goloff

Endorsing Organizations: People's Justice Council, US Demand Climate Justice, US Climate Action Network, Climate Trace Puerto Rico, ActionAid USA, Institute for Policy Studies Climate Policy Program, Oil Change International, EcoEquity, Care About Climate, North Carolina Interfaith Power and Light, Minnesota Interfaith Power and Light, A Wisdom Keepers Indigenous Delegation, Oxfam America, Center for Biological Diversity, Women's Environment and Development Organization (WEDO), 350.org, Alabama Center for Rural Organizing and Systemic Solutions (ACROSS), Clean Energy Action, Climate Cardinals, Empower Our Future, Gen-Z for Change, Justice is Global, Maryknoll Office for Global Concerns, Mississippi Rising Coalition, New Alpha CDC, Oil and Gas Action Network, Texas Impact, The United Methodist Church – General Board of Church and Society, Women's Earth and Climate Action Network, Fridays for Future – Capital District NY, Action for the Climate Emergency, Nuclear Information Resource Service, Earth Ethics, Inc., The Oakland Institute, NC Climate Justice Collective, Center for Sustainable Community Development, Association for Promotion Sustainable Development, East Africa Climate Change Network, The Imani Group, Interfaith Power and Light, Green the Church, 7 Directions of Service, Zero Hour, Healthy Planet Action Coalition, Share the World's Resources, Elders Climate Action, Arm in Arm, Research Institute, Sustain Cities, 198 Methods, GreenLatinos, United Women in Faith, Women's Earth Alliance, Climate Action Network Zimbabwe, Physicians for Social Responsibility Pennsylvania, Climate Families NYC, Women's Earth Alliance, Abbi Nsoma Foundation

Not all organizations who endorse this document may be aligned with every element, but rather endorse the overall framework.

A special thank you to Reverend Michael Malcom, and The People's Justice Council, for acting as the fiscal home and the institutional backbone of support for the US Fair Shares NDC Collaborative.

# Table of Contents



# Introduction

The world is at a critical juncture in the fight against climate change as the window rapidly narrows to limit global warming on average to 1.5°C. The urgency to act is underscored by escalating climate impacts across the globe, especially in marginalized communities and countries, including in the United States (US). The Paris Agreement, adopted in 2015, set forth a global framework to avoid the most dangerous effects of climate change by limiting global warming. A core part of the agreement requires that countries develop climate pledges called Nationally Determined Contributions (NDCs). These NDCs are updated every five years, and the expectation is that countries will develop and deliver on enhanced pledges each round.[xiii] The Global Stocktake at last year's United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP28) in Dubai was the first collective review of aggregate NDC impacts. The text of the Global Stocktake made clear that current NDCs and the rate of implementation are inadequate to keep the world under 1.5°C of average global warming.[xiv] Accelerating implementation over the next five years is essential if the world is going to have any chance of avoiding climate catastrophe.[xv]

The global effort required to take on this challenge cannot be divorced from the principles of equity and fairness embedded in the deal. The Paris Agreement relies on voluntary contributions by each party to the Agreement, a reality that underscores why it is important to understand each country's equitable contribution to the global effort, or "fair share" of climate action.[xvi] A Fair Share is based on equity and works from a very basic principle: the size of a country's responsibility for climate action is based on its historical emissions and its capabilities for action.

NDCs are, by definition, nationally determined yet must be globally informed by scientific standards and universally accepted equity principles. According to the UNFCCC and Paris Agreement, countries with greater responsibilities and capabilities must contribute more to the global effort in line with global goals. The US holds responsibility for causing a major portion of the climate crisis and accruing benefits from historic and current emissions, and therefore must contribute above and beyond all other countries, considering that:

- The IPCC reports that North America's 4% of the global population is responsible for almost 25% of the global emissions since 1850, compared to South Asia's 25% of the global population creating only 4% of the historical emissions in the same time period. China is now the largest annual emitter, but has contributed about half of the total US emissions so far even though it has four times the population size.[xvii]
- US oil output has surged in the past decade to record levels of production and is now far above any other country in history at 13.4 million barrels per day (MPD). The US produces about 50% more than the second and third largest producers, Russia and Saudi Arabia (each at about 9 MPD).[xviii]
- US production of LNG (Liquified Natural Gas) is now more than any other country, yet the industry plans to expand by another 200% by 2030, more than all other countries combined.[xix] Advertised by industry as "cleaner than coal," methane from LNG's production and burning traps 82 times more heat than CO2.[xx]
- US efforts to reduce domestic greenhouse gas emissions since 1990 have been far below what is required for the world to limit warming to 1.5°C, according to the US EPA's submission to UNFCCC in April 2024, only about a 1% reduction since 1990.[xxi]

These four facts - from historic emissions to current and planned oil and gas output to failure to reduce absolute emissions - compel the US to reassess its Nationally Determined Contribution to be much more ambitious than previous NDCs. Given how quickly the climate crisis is accelerating, US commitments and actions will determine whether the world can limit warming to 1.5°C, influencing global climate policies and the future of our planet.

The Fair Share NDC presented below models a fair, science-based commitment by the US to global climate action in 2025. .

## Public Participation in the US NDC 3.0/2025 Process

Several public participation frameworks provided guidance on how the US will engage sub-national governments and civil society in the development of this NDC. This includes Paris Agreement Article 12, Action for Climate Empowerment Work Programme (ACE), which underscores the importance of an informed and active society to meet all climate goals.[xxii] The Administrative Procedures Act mandates that federal agencies must engage the public in rulemaking by providing opportunities to submit feedback.[xxiii] In addition, the Fifth Open Government Plan emphasizes improving public access to information and increasing public engagement to enhance transparency, accountability, and integrity in government actions.[xxiv]

This Fair Share NDC requires a consultation process led by State Department's ACE Focal Point, the White House Climate Policy Office, the White House Environmental Justice Advisory Council, and other relevant actors to ensure a broad participatory process of key stakeholders. The US will translate the US NDC into Spanish to expand accessibility and support better-informed community involvement. Such steps are essential for fostering a participatory approach to develop climate strategies, ensuring that actions reflect the diverse needs and contributions of all community sectors.

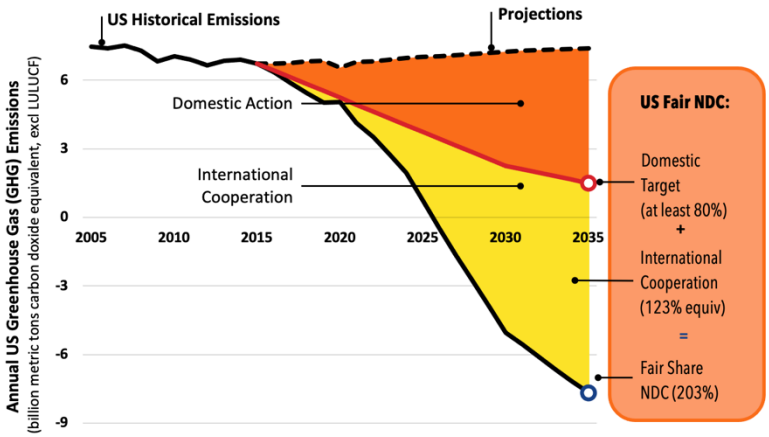
This public participation process is aligned with the US whole-of-government approach and Justice40 initiative, and has engaged leaders and innovators in climate action at state, local, and tribal government levels with inclusive decision making to inform its outcomes. The US commits to

the principle of Free, Prior, and Informed Consent (FPIC), ensuring that Indigenous Peoples and other affected groups have a meaningful say in decisions that impact their lands and way of life. Additionally, this NDC incorporates feedback from civil society including, but not limited to: Black, Indigenous, and people of color (BIPOC) stakeholders; disabled people; women; youth; LGBTQIA+ people; im/migrants; and nationally-specific affected communities in regions most susceptible to the harshest climate impacts, including frontline and fenceline communities. The highest levels of ambition relies on the perspectives, research, lived experience, and technical support of these communities. The integration of these groups into the development and implementation of the NDC is not only a matter of justice but a strategic imperative to enhance the effectiveness of the US' climate response.

# The US Fair Share

**The US fair share of the 2035 global mitigation effort necessary to limit the global temperature increase to 1.5°C is equivalent to emissions reductions of 203% below its 2005 level, which is about 14 billion metric tons of carbon dioxide equivalents (CO2eq).[xxv] Two types of action, domestic and international, are required to fulfill the US Fair Share NDC:**

- The US will cut domestic emissions by 80% of 2005 levels by 2035 (6 billion metric tons). This will be done by means of specific measures to double energy efficiency, achieve a goal of 100% clean and renewable energy for the electricity sector by 2030 at the latest, protect and restore US carbon sinks, electrify everything, and build community infrastructure that supports low carbon lifestyles.
- As the world's number one oil and gas producer, the US will phase-out fossil fuel extraction by the early 2030s and move swiftly to immediately terminate all investments in fossil fuel expansion and end fossil fuel exports.
- This, however, will not suffice to meet the US's fair share. Thus, the US will also support developing countries in their decarbonization efforts by committing to provide enough international finance and technology support to yield an additional 8 billion metric tons of emissions reductions. By doing so, the US will close its 123% gap and achieve its 14 billion metric ton mitigation fair share.




The chart, developed by the Civil Society Equity Review, shows the US's mitigation fair share, which is partitioned into domestic and international support components.

The minimum annual international finance to begin to reach the US fair share comes to $106 billion for international mitigation support and $340 billion for international adaptation and loss & damage support, for a total of $446 billion. A more detailed discussion of these numbers can be found below, (see Climate Finance and International Support).

This US Fair Share NDC is rooted in the understanding that true climate action is intrinsically linked to rectifying past inequities and enabling a just transition for all. The NDC acknowledges that as the richest country in the history of the world, the US is required to lead and ensure that US efforts are proportionate to historical emissions and sufficient to repair the damage caused through the generation of wealth from these emissions.

The remainder of this document summarizes a comprehensive strategy to dramatically decrease emissions while increasing the United States' climate commitments and actions by 2035. As the US adopts this Fair Shares approach, the US aims to catalyze a wave of enhanced actions worldwide, fostering the global cooperation that is essential for achieving the goals of the Paris Agreement.

# Domestic Mitigation

The US will reduce its territorial emissions by 80%, or 6 billion metric tons by 2035. These actions must consider the rights of marginalized groups such as Black, Indigenous, and people of color (BIPOC) stakeholders; disabled people; women; youth; LGBTQIA+ people; im/migrants; and nationally-specific affected communities in regions most susceptible to the harshest climate impacts, including frontline and fenceline communities. Below is a sector by sector outline of how these emission reductions will be made possible.

## Fossil Fuel Phase-out

The US is committed to ending the fossil fuel era with a fast and fair phase-out of all fossil fuel extraction and an immediate end to fossil fuel expansion. To equitably phase-out fossil fuels with a reasonable chance of preventing emissions overshoot of the 1.5°C Paris Agreement goal, coal production will end by 2030 and all oil and gas production by 2031 for a 66% chance of limiting temperature rise to 1.5°C. Delaying these phase-out goals to 2034 reduces the chance of preventing overshoot to just 50%.[xxvi]

*Current Fossil Fuel Production and Consumption Snapshot*

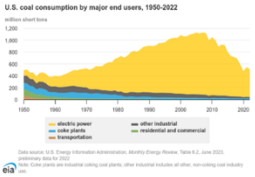
**The Top 10 Oil Producers and Share of Total World Oil Production in 2023[xxvi]**

| Country | Million barrels per day | Share of world total |
|---|---|---|
| United States | 21.91 | 22% |
| Saudi Arabia | 11.13 | 11% |
| Russia | 10.75 | 11% |
| Canada | 5.76 | 6% |
| China | 5.26 | 5% |
| Iraq | 4.42 | 4% |
| Brazil | 4.28 | 4% |
| United Arab Emirates | 4.16 | 4% |
| Iran | 3.99 | 4% |
| Kuwait | 2.91 | 3% |
| Total top 10 | 74.59 | 73% |
| World total | 101.81 | |

**The Top 10 Oil Consumers and Share of Total World Oil Consumption in 2022**

| Country | Million barrels per day | Share of world total |
|---|---|---|
| United States | 20.01 | 20% |
| China | 15.15 | 15% |
| India | 5.05 | 5% |
| Russia | 3.68 | 4% |
| Saudi Arabia | 3.65 | 4% |
| Japan | 3.38 | 3% |
| Brazil | 3.03 | 3% |
| South Korea | 2.55 | 3% |
| Canada | 2.41 | 2% |
| Germany | 2.18 | 2% |
| Total top 10 | 61.08 | 61% |
| World total | 99.95 | |

**U.S. coal consumption by major end users, 1950-2022**



The US government recognizes a fossil fuel phase-out will require significant investment, close coordination with international partners and subnational actors, and accelerated innovation to reinvent energy systems to replace those that are inefficient or are fueling the climate crisis.

This phase-out will be fast and full, and requires the following actions:

- No new fossil fuel expansion in the US, effective immediately. "No new" fossil fuels aligns the US with heeding the urgent warnings issued by scientists and the International Energy Agency that any further fossil fuel expansion risks surpassing the Paris Agreement limit of 1.5°C.
- The US will halt all permits and leases for new fossil fuel production and infrastructure on public lands and waters.

- The US will phase-out gas and oil exports by banning liquified natural gas (LNG) exports, with the current pause on LNG export permits made permanent, and responsibly reinstating the crude oil export ban.[xxvii] Exports will be immediately capped, steadily reduced, and ultimately eliminated, while regulations become fully and/or more robustly enforced – including the Clean Water Act (currently exempted for fracking) and Clean Air Act, in cooperation with other major producers to ensure price stability.
- By 2031, the US will equitably phase-out existing fossil fuel production and infrastructure by means of a just transition. It will center communities reliant on the fossil fuel industry by engaging workers to decommission fossil fuel infrastructure, and to build renewable energy infrastructure to fill energy gaps as needed.

This transition will also be fair, funded, feminist, and equitable.

- A *funded* fossil fuel phaseout, means that wealthy Global North countries commit to paying their fair share for fossil fuel phase-out in their own countries and in the Global South.
- A *feminist* fossil fuel phaseout means a gender-just energy transition from an extractive, fossil-fueled economy to a regenerative, care-based economy that sustains life and well-being for all.

Top priorities for a fast, full, fair, funded, feminist, fossil fuel phaseout include:

- End all fossil fuel subsidies and international public finance for fossil fuels by the end of 2025, including US tax exemptions for both Direct and Indirect Drilling Costs[xxviii] currently allowing domestic exploration to be more profitable[xxix] than it would otherwise.
- Enact environmental impact fees and taxes that will gradually rise to incentivize renewable energy distribution and disincentivize polluting industries. These fees and taxes must not be passed onto the consumer and must be paid by the companies themselves as an overhead cost. Company accounting methods must show compliance of these standards.
- Hold fossil fuel companies and electric utilities accountable for obstructing the clean energy transition by putting more effort into enforcing public nuisance, fraud, and consumer protection laws.
- Create adequately resourced job transition programs to ensure support for training and mentorship, equal pay, parental leave, and workplace protections for safety and security.
- Fund health initiatives for those affected by extraction (e.g. Cancer Alley, Appalachia, tribal lands), and community programs to foster renewable energy development and economic diversification.
- Increase investments in care infrastructure to support community health and well-being, addressing the gendered and racialized health impacts of fossil fuel siting and production.
- Invest in care infrastructure in recognition that unequal care work burdens present prohibitive challenges to employment in renewable energy jobs for women and people of color, and the benefits of jobs created in the transition must be accessible to all.
- Build out affordable, community-led clean energy by maximally directing IRA clean energy benefits and Federal Emergency Management Agency (FEMA) dollars toward community and rooftop solar, wind, storage and energy efficiency, and weatherization technologies. Improve weatherization, grid resilience, clean energy and efficiency projects through the Bipartisan Infrastructure Law (BIL). Pass additional funding to support the transition to 100% renewable energy.
- Provide policy changes to streamline the transition and break down barriers to access energy markets regionally or locally.
- Enact universal bans on utility shut offs to stop utilities from cutting life-saving electricity off during extreme heat and cold spells.

- Stop the expansion of plastics, petro-chemicals, and agro-chemicals, and other products to which fossil fuels are being diverted, beyond energy.
- Create a program within the EPA to monitor the health implications around decommissioned oil and gas wells to ensure long-term well-being.

The US commits to avoiding dangerous distractions and unproven technological solutions, such as forest offsets; carbon market mechanisms; Carbon Capture and Storage (CCS); Direct Air Capture (DAC); Enhanced Oil Recovery (EOR); and other false solutions that act as dangerous distractions to only delay phasing out of fossil fuel production. In line with a fossil fuel phase-out, the US will begin a nuclear energy phase-out by 2030. The US will not use descriptors such as "unabated" to qualify the fossil fuel phase-out commitment. These technologies and distractions will no longer be subsidized by the federal government. All fossil fuel and nuclear subsidies will go toward promoting renewable energy, building out storage facilities, and promoting a circular economy in order to use materials that have been already extracted to build our climate friendly economy.

## Electric Infrastructure

To rapidly phase-out fossil fuels, the US will take bold action to prioritize the swift build-out of renewable energy infrastructure using a just transition framework. Using tools such as executive action, declaration of a climate emergency, enacting new legislation, and other legal and regulatory opportunities; the US will contribute significant resources to ensure renewable energy will be available for all.[xxx] Therefore, the US commits to:

- Reach 100% clean, renewable energy for the electric sector by 2030 at the latest. This will be done by maximizing distributed and community clean energy and storage, as well as energy efficiency and conservation technologies, to promote resilience, affordability, and the rapid transition away from fossil fuels – especially in communities at risk of climate harms and communities impacted by environmental injustice. Redirected subsidies and direct grants will be provided to communities at risk of climate harms and those impacted by environmental injustice to invest in renewable energy and energy efficiency.
- Identify solutions to enhance grid and market efficiency to get energy to where it needs to go from renewable energy sources to reduce reliance on fossil fuels as quickly as possible.
- Permitting reform for renewables that: 1) maximize energy efficiency and energy conservation—and reject unnecessary energy-intensive industries like crypto-mining; 2) maximize distributed energy resources like rooftop and community solar, storage, and microgrids that increase health and environmental benefits and avoid large scale transmission harms; 3) fulfill remaining energy demand with responsibly-sited large-scale renewable energy and transmission that has gone through robust environmental review and early community engagement; 4) halt dangerous distractions that perpetuate fossil fuels and pollution from coming online and also ensure responsible mineral recovery, reuse, and recycling and minimized critical mineral extraction.[xxxi]; and 5) operate only with FPIC of Tribal Governments and impacted communities.

## Military

The US military is the largest institutional user of fossil fuels and producer of greenhouse gasses on the planet.[xxxii] Prior to the Paris Agreement in 2015, countries exempted military emissions from their reporting, and now it is considered optional.[xxxiii] The US commits to:

- Measure these emissions and report them publicly. Monitor these emissions and include those measurements as part of the total US greenhouse gas emissions with the objective to lower these emissions significantly in line with the US Fair Share.
- Move away from fossil fuel infrastructure and create plans for electrification and renewable energy production for overall operations. Identify efficiency and electrification opportunities for planes, vehicles, and other equipment.
- Acknowledge that US military operations are a significant source of environmental degradation, including from direct bombing, and through the pollution of water, air, and communities' health due to the legacy of chemical weapons testing.[xxxiv]
- Assess its military budget to identify areas that can be trimmed in order to allocate financial resources to reach the country's fair share for international climate finance.

## Transportation

Second to the military, the transportation sector is currently the US' largest source of emissions.[xxxv] Therefore, the US will reimagine and redesign transportation systems across the board to decarbonize them as well as make them more accessible and affordable.[xxxvi] The US will:

- Direct the Environmental Protection Agency to issue strict, technology-forcing Clean Air Act rules to rapidly reduce greenhouse emissions from motor vehicles, airplanes, ships and trains.
- Construct high speed rail between major cities, and develop multimodal local transportation systems for buses, bikes, walking, street cars, and subways by 2030. Bus routes and light rail options will also be made available to rural communities to gain access to the wider network of public transportation options.
- Urban, suburban, and rural planners will be encouraged to have commercial and residential zoning combined to promote smaller walkable communities where residents will be encouraged to learn, shop, and live locally.
- Sales of new internal combustion engine (ICE) vehicles will be phased out by 2035 with an additional climate tax to disincentive ICE vehicles starting in 2025. ICE and Electric SUVs will face an additional tax surcharge given the pressure they put on limited renewable energy, and supplies of transition minerals.
- Scale research to upcycle and recycle batteries from electric vehicles and to create the circular economy that is needed to limit resource extraction for this transition.
- Limit emissions from airline travel with a Frequent Flyer Levy, which increases taxes on a flight for each flight that is taken in a given year. For example, the first flight would be taxed normally, but each additional flight would add a higher and higher tax based on how many flights had been taken that year by that individual.[xxxvii] Additional taxes and fees will be applied to those with private jets, as well as travel by business and first class to deter their use given the carbon impact of private air travel.

- Mineral extraction to support this transportation transformation must follow FPIC for Indigenous People and frontline communities.

## Industry

Industry, specifically cement production, mining, steel manufacturing, and chemical production, are responsible for about a third of all US emissions (direct emissions 21.4%, indirect emissions 16.6%). Most of the industrial emissions (73%) come from on-site fossil fuel combustion to create the end product. The indirect emissions from this sector are also primarily from energy generation, but are purchased from off-site energy companies.[xxxviii] Industry will be required to:

- Reduce emissions 80% by 2035 in line with the overall US Fair Share.
- Increase efficiency in addition to requiring an immediate fossil fuel phase-out and switch to electrification. Given this sector's emissions are directly attributed to the combustion of fossil fuels, transitioning to clean, renewable energy will have an immediate and direct impact on reducing carbon emissions, methane, and other greenhouse gasses from industry.
- Dangerous distractions like Carbon Dioxide Removal technologies (including carbon capture from smokestacks and direct air capture) will not be permitted in this carbon reduction requirement, as these technologies are risky and prohibitively expensive.[xxxix]

## The Built Environment

According to Architecture 2030, the built environment is responsible for 42% of emissions globally. Building operations account for 27% emissions, and embodied carbon (cement, iron, steel, and aluminum) are responsible for an additional 15%.[xl] In order to cut carbon from the building sector:

- Existing buildings will be required to be repurposed and designed to produce zero emissions (e.g. electrification of homes,), and repurposed with low carbon materials.
- All emissions from the built environment will be eliminated by 2035 to keep below 1.5°C.
- Builders, architects and contractors will be required to design buildings to be climate resilient and made for their surrounding environment to optimize passive heating and cooling, solar energy production and storage, shading, tree cover and green roofs, weatherization and energy efficiency technologies, concrete alternatives, energy management systems, and other innovative technologies. Habitats and natural resources are preserved to the best of their ability to support carbon sinks and biodiversity.
- Federal funding will be provided to support tree and urban forestry maintenance to ensure long-term health of trees.
- Local zoning will be encouraged to focus on infill, develop dense and walkable mixed use areas, and to give older buildings the opportunity to be repurposed.[xli]
- Climate resilient design guidelines for public and private infrastructure should be created by FEMA and NOAA to ensure new infrastructure is climate ready.

## Waste Prevention and Recycling

A circular economy that extracts less and uses more of what we already have for longer is critical to address methane emissions from waste, improve health effects from waste management and reduce waste and production in the United States overall. Recognizing this, the US will:

- Develop guidelines for a National Zero Waste Plan by 2026. This will include reducing the production, distribution, and sale of single-use items, eliminating organic and electronic waste in the waste stream, reducing food waste in our agricultural systems as well as point of sale opportunities, and increasing and financially supporting a just transition to waste prevention, reuse, repair, recycling and composting efforts while making it more accessible to the population overall. With a circular economy in mind, this plan will also include encouraging the repair of already purchased items, upcycling, and processing e-waste domestically.
- Work with domestic recycling and composting facilities to increase capacity to process more material, and identify US markets for recycled products.
- Invest in local repair, reuse, and refill to replace single-use items. This will reduce the need for net materials and minerals.

## Plastics

More than 99% of plastic is made from chemicals sourced from fossil fuels.[xlii] In 2019, plastics accounted for 12% of the world's oil demand and 8.5% of global gas demand.[xliii] With industry looking to double or even triple production by 2050,[xliv] plastics are projected to account for 20% of total oil consumption by 2050.[xlv] Left unchecked, plastic could account for up to 26% of the remaining carbon budget, using the 1.5°C temperature threshold.[xlvi] It's important to acknowledge that the burden of plastic production and its environmental repercussions from extraction to disposal often disproportionately impacts low-income communities and communities of color.[xlvii] To effectively phase-out plastic production the US will:

- Create stringent regulations and incentives for sustainable alternatives including reuse systems, and investments in research and innovation to replace plastic production and consumption.
- Identify baseline values, targets, well-structured timetables and monitoring to reduce plastic production and its lifecycle greenhouse gas pollution.
- Ban single use plastics by 2031 as well the production of replacement materials that cannot be safely and effectively recycled or composted.
- Phase-out virgin plastic production by 2034, primarily through preventing the production and use of unnecessary plastics and secondarily through reuse and safe, effective, and non-toxic recycling.
- Send reusable, recyclable, or compostable materials to the proper channels, not to landfills, incinerators, "chemical recycling" or other facilities that release large amounts of pollution and are false solutions to the plastic pollution problem.[xlviii]

## Agriculture

Food systems contribute more than a third of all emissions globally and industrial animal agriculture is the leading culprit in the system.[xlix] Emissions from farming include carbon dioxide from loss of natural ecosystems and use of fossil fuels to run farm operations, methane primarily from livestock production, and nitrous oxide from fertilizer application.[l] The most potent gases from industrial farming are nitrous oxide and methane. To manage these gases:

- Agricultural systems will be required to use significantly less fertilizers to prevent nitrous oxide, shift to no-till and no-plow farming methods, and require use of cover crops.
- The US Department of Agriculture (USDA) will promote conservation programs and co-planting to build and protect soil health.
- There will be a phase-out of Concentrated Animal Feeding Operations (CAFOs) to redistribute animal production to smaller farms and ranches by 2035 to limit methane. Cattle are the largest source of agricultural methane due to their natural digestive processes. However, the problem is exacerbated by CAFOs for all species because of how the animals are fed and the way their manure is stored in large ponds, which creates climate, environmental, and public health hazards."[li]
- Dangerous distractions such as manure methane biogas, "sustainable intensification," "carbon farming," or relying on feed additives will not be included in agriculture absolute emission reduction targets. There will be no government support for food processing, food retail and agribusiness companies that claim emissions intensity reductions, but do not report their Scope 1, 2 and 3 emissions.
- Smaller farms and ranches will be supported to manage livestock based on the carrying capacity of the land, the ability to rotationally graze, and making sure they can finish the animal (meaning it goes directly to market rather than being sent to a CAFO for extra weight before being processed). This will provide healthier soils and promote healthy ecosystems for native wildlife as well.
- Lands that are no longer being used for farming will be converted back to the original ecosystem (forests, grasslands, swamps, etc.) to provide additional natural resilience and to restore carbon sinks throughout the country.
- Subsidies will be shifted from larger factory farms to smaller farms by 2030.
- The US will reduce emissions in this sector by at least 50% by 2030.

The US commits to a change in agriculture that will follow just transition principles and be carefully managed.[lii] Regardless of farm size, labor protections for workers in the agricultural sector, animal protection measures, biodiversity protections, and environmental justice protections will be enforced. The US will support sustainable farming initiatives to create a more regenerative, agroecological approach that relies on and supports smaller farms, ideally owned by those working in them, and increasing access to farming land for those who have been historically marginalized from ownership. A critical component of this transition will be to uplift, honor, and center traditional knowledge from Indigenous Peoples for best farming and land management practices.

## Forestry

The United States has extensive forested areas that currently hold 45.5 billion metric tons of carbon aboveground and in soil pools.[liii] Currently forests and other lands (grasslands, rangelands, etc.) offset 13% of the US' total greenhouse gas emissions.[liv] Two-thirds of the forests in the US are

privately or state owned with the majority of these lands focused on timber production. The remainder of forest acres are managed by the federal government.[lv] The USDA indicates that by 2070 forests in the US will no longer be a carbon sink, but an emitting source due to wildfire, timber production, sea level rise, and deforestation via development of suburban and urban areas.[lvi] To prevent this, the US will:

- Develop programs to incentivize private forests to limit deforestation from development by increasing the Land and Water Conservation Fund.
- Acquire additional forested land to become part of national forests in the eastern US, and increase funding for the Forest Legacy program.
- Manage US demands for construction and paper products by integrating agricultural waste and agricultural fibers into products that currently use harvests from US forests.
- Ban the burning of agricultural waste which produces methane, nitrous oxides, black carbon, and other greenhouse pollutants. Also, shift federal procurement policies, especially the acquisition of paper products to tree-free sources.
- Create incentive programs to encourage longer rotations on private and state timber producing lands.
- Create stronger and lasting protections for mature and old growth forests on federally managed lands as older forests store disproportionately higher amounts of carbon than younger forests and continue to sequester carbon and are generally more resilient to disturbances.[lvii]
- Ban the production of wood pellets that are shipped to Europe and other countries to be burned for energy.
- Provide subsidies to ensure the transition to the cleanest of wood stoves to greatly reduce stoves that emit black carbon, methane and other pollutants.

## Oceans

Oceans are home to critical ecosystems and biodiversity, central to many communities' economic and cultural existence, and act as a crucial carbon sink.[lviii] The US will implement climate-protective actions in ocean areas under its jurisdiction by 2030 to reduce greenhouse gas emissions, conserve and restore coastal marine habitats that provide climate mitigation benefits, and increase coastal community health. To do this effectively, the US will involve multiple stakeholders, particularly coastal communities that are disadvantaged across the US, to ensure the national ocean management strategies are developed in consultation with local communities, indigenous groups, and NGOs. The US will:

- Regulate shipping and other ocean vessels including cruise ships to reduce traffic and speed, decarbonize emissions from vessels and ports, and reduce other damaging impacts from ocean-based transportation to the marine environment.
- Ensure ocean-based renewable energy and other ocean-based projects are carefully regulated, sited, and designed to minimize emissions and other negative impacts to the marine environment.
- Restore coastal and marine habitat that helps retain the oceans' beneficial climate-regulating functions, boost coastal resilience to climate change impacts, and support

sustainable coastal industries and other economic opportunities that are also aligned with local community priorities.

- Expand Marine Protected Areas and adopting the High Seas Treaty by to protect at least 30% of marine areas within and outside of the the US' jurisdiction, with a focus on geographically representative, ecologically connected, and climate-resilient protected areas, including those that are biodiversity hotspots such as estuaries, oyster beds, tropical coral reefs, mangroves, kelp forests, and seagrass beds, and those that are underrepresented in current protections such as seamounts and deep-sea coral reefs.
- Apply the precautionary principle to untested and potentially harmful "solutions" to climate change, such as carbon removal and storage proposals for the oceans and deep sea mining for minerals used for renewable energy.

## Methane from Hydropower and Reservoirs

Reservoirs, lakes, storm water, and wastewater ponds all represent ongoing and continuous point-source emissions of methane that significantly exceed wetland-based emissions. Aquatic methane produced by hydroelectric reservoirs is of particular concern.[lix] Nutrient loading of freshwater associated with agriculture, CAFO systems, and domestic wastewater results in untold incidents of hypereutrophic status within watersheds across the US, that in turn triggers harmful algal blooms,[lx] and explosive growth of aquatic vegetation. The carbon trapped in the resulting sludge quickly transitions to biogenic methane and may account for the surge in methane documented by NOAA, especially since 2006.[lxi] To address this issue the US will:

- Study below-dam emissions through the turbines, where the majority of the methane is released.
- Publish annual aquatic methane emission status for all dams and reservoirs, starting with those controlled by the US Bureau of Reclamation and US Army Corps of Engineers.
- Expedite permitting to allow water and air methane measurements of target reservoirs.
- Create a plan by 2028 to lower methane from human made reservoirs.

## Domestic Finance

To get to a 80% emission reduction target by 2035 will be no small feat. This will require a significant amount of funding that will be infused throughout the United States to reach these goals. This effort will require an influx of funding never seen before for climate action to transform US electric, transportation, industry, waste, agricultural systems, and others. To transform the economy at this scale will require an investment larger than the New Deal. As a result, the country will be more connected, less polluted, modernized and a leader globally for what climate action looks like. All US sectors will consider climate in their budget requests given that climate change will affect everyone, everywhere. This is about an investment in the American people, but also will provide a better future for the world overall.

# Climate Finance and International Support

## International Climate Finance

International climate finance is as important to the US Fair Share NDC as domestic ambition. Considering the size of the US's historical emissions and its capacity, the true US fair share effort is too large to be addressed entirely through mitigation at home. After realizing 80% reductions by 2035 domestically, the US will still need to reduce emissions by 9.2 billion metric tons to meet its fair share. Which is why the US will provide finance for developing nations to develop sustainably, without locking in additional fossil fuel production, infrastructure, and emissions. Due to historical emissions, the US is also responsible for the climate impacts in the Global South, and therefore must support efforts to address adaptation and loss and damage for impacted communities worldwide. This is especially true for communities vulnerable to climate impacts in the Global South who did little to nothing to create this crisis.[lxii] The US will acknowledge that the lack of significant climate finance flows and uncertainty around international commitments have already undermined ambition. A strategic escalation of climate finance is clearly needed, and it must be large enough to meet the moment. Therefore, this NDC commits to $446 billion a year in grant-based climate finance, which is to be divided between mitigation, adaptation and loss and damage. Though this commitment will be delivered in various ways, it must include delivering substantially scaled-up funding to the Green Climate Fund, Adaptation Fund, and Fund for Responding to Loss and Damage, with a pledge to the latter at least an order of magnitude higher than the current negligible commitment.

## How the US' Fair Share of Climate Finance was Determined

Currently, there is no comprehensive needs assessment to determine the full climate finance need. It is also worth noting that any such figure will depend on the success of mitigation, as adaptation needs and loss and damage increase with higher temperatures. However, common estimates of the annual climate finance need range from a "minimum baseline" of $1 trillion to $5 trillion a year, and some estimates run even higher. US Treasury Secretary Janet Yellen recently outlined that at least $3 trillion per year will be needed to finance a global transition to a low-carbon economy,[lxiii] but this figure includes private investment and doesn't appear to include the public funds needed to address adaptation or loss and damage. Global movements of frontline communities recognize a "climate debt" of at least $5 trillion a year, incurred by the Global North and payable to the Global South.[lxiv] In the negotiations themselves, developing country governments[lxv] and Climate Action Network International (CAN-I)[lxvi] have submitted initial proposals for around $1 trillion a year in climate finance at minimum for the new collective climate finance goal by 2030. Any negotiated target will need to be re-evaluated frequently as time goes by and need assessments improve, and the US will be supportive of these efforts.

To determine the US fair share of climate finance, it is important to note that 7.3 billion metric tons of emissions need to be reduced outside the US, but with the US' help. This is for 2030, since the climate finance target is near term, rather than the whole decade. The Green Climate Fund (GCF)'s project portfolio average mitigation cost is $14.47 per ton, which is used to turn these tons of emissions into dollars.[lxvii] The US climate finance fair share for mitigation is calculated to be **$106 billion per year starting in 2030**.

This is, however, only part of the puzzle, because mitigation is not the only aspect of climate finance. Emissions have already locked in a need for adaptation and ongoing loss and damage. A true fair share approach recognizes that the US' outsized historical emissions means the US has a considerable share of responsibility for these impacts and for the costs of addressing them. After all, many of the worst hit countries have contributed very little or nothing to the global problem of climate change. than translating emissions reductions into dollars, the US responsibility is compared to a needs assessment. Better needs assessments for adaptation and loss and damage will be required, but based on the ones currently available (which states the need for 2030 as being $700 billion a year), the US share is **$340 billion a year.**[lxviii] Thus, the United States commits to an initial contribution of **$446 billion in total per year**.

## Meeting our Fair Share with Equity at Home

The US recognizes that it is time to think big to achieve the amount of public finance that will be needed to stabilize the climate system. This effort will soon be on the same scale as the global military budget, which has reached $2.44 trillion a year.[lxix] Such a sum will not be cobbled together by small, disparate initiatives. Nor will redirected private finance suffice. It is also not acceptable to attempt to meet the fair share in a way that increases inequality or burdens frontline communities domestically. Rather, the US must meet its fair share equitably at home. In general, this rapidly evolving discussion is taking place within a space defined by income and wealth taxes at one end and pollution taxes at the other. Possible funding mechanisms include, among other things: the redirection of fossil subsidies to renewables; progressive pollution taxes such as frequent flier levies; the redirection of military budgets; a reinvented system of International Monetary Fund (IMF) Special Drawing Rights; and progressive taxes on financial transactions, estates, and wealth. In addition to providing climate finance, given the debilitating impact of the climate crisis developing country economies, debt cancellation is essential and there should be a wholesale reform of the debt system within a multilateral legal framework under the auspices of the UN. Changes to World Trade Organization rules discriminating against developing countries' raw natural resource commodities and finished products, as well as a waiver on climate-friendly technologies under its intellectual property rights, will also create more fiscal space for developing countries while lowering the climate finance bill for developed countries.

The following examples show specific systematic shifts that can produce a significant amount of funding. First the climate damages tax proposal imagines a fossil-fuel extraction charge, levied on coal, oil and gas, or additional taxes on corporate and shareholder profits from and investments in fossil fuels and the production of goods that drive fossil fuel use (e.g. non-electric vehicles, single-use plastics, and buildings using natural gas for heating and cooling).[lxx] Eighty percent of the money raised would go to the loss & damage fund and 20% would go to people facing marginalization and climate harms within the global North.[lxxi] The second idea is to create a global billionaire tax, which economist Gabriel Zucman has fleshed out for the Brazilian G20 presidency.[lxxii] Such a billionaire tax would require no international tax authority, but merely cooperation between sovereign states, as we know them today.[lxxiii] Whatever happens, the world must agree to shut down tax havens.

The multinational architecture, which all this is organized will have to extend beyond the traditional ambit of the UNFCCC to include the emerging UN Tax Convention,[lxxiv] which will evolve in a world besieged by the climate emergency. All these mechanisms can produce a great deal of public climate finance in a progressive manner that reduces inequality between countries and within countries. That said, progressive global climate taxation isn't going to come easily.[lxxv] Critically, the climate finance system must be fair within countries as well as fair between them. The poor and working

class communities of the United States – most of whom live paycheck to paycheck – cannot be expected to dig into their pockets to pay the costs of international climate action. Rather, if the US is to do its part in a viable global transition, those within the US who have done the most to fuel the climate crisis, meaning the ultra-rich and polluting corporations, must be the ones who bear the costs of this transition by paying their fair share both in the global north and global south. This would be aided by global wealth and pollution taxes.

### The Importance of Grant-based Finance

As critical as the amount of climate finance is, the quality is equally important. Ever since the $100 billion climate finance goal was developed, contributors including the United States have used loans and included private finance to portray that the target was met when very little real public climate finance has actually been flowing. This has profoundly undermined trust at the international level and left poor countries facing an escalating crisis with few resources. Many developing countries, particularly middle-income countries who have been hammered by repeated climate impacts such as hurricanes, have been caught in a debt trap where finance payments are eating away at their ability to function much less rebuild and adapt. The US commits to stopping the practice of including loans and non-public finance in calculations to reach target international climate finance goals.

True climate finance, especially under a fair shares approach, is new and additional, grant-based finance that does not contribute to debt. While private sector financing is part of the transition, the private sector cannot be expected to fulfill a government's responsibilities. It must be counted as separate. Therefore this NDC is focused on public, grant-based climate finance as part of the US fair share.

## Adaptation and Loss and Damage

The US will include deep consideration of racial, gender, economic and disability justice in consultation processes and in the development of the plans listed below. These strategies will include enhanced support for US island territories, such as Puerto Rico, Guam, American Samoa, Northern Mariana Islands, US Minor Outlying Islands, and the US Virgin Islands.

### Adaptation

The United States will create a National Adaptation Plan by 2027 to ensure that the country, including the communities in the most vulnerable situations, are supported domestically in response to climate impacts. The US acknowledges at the federal level that it has largely adopted a reactive and disaster-based approach to responding to climate impacts rooted in single-point in time events (i.e. shocks) over climate stressors (i.e. sea-level rise, heat).[lxxvi] Although federal agencies have been required to develop climate adaptation plans , individual agency adaptation plans do not foster the type of inter-agency and subnational collaboration on risks that are needed.[lxxvii] The National Adaptation Plan will incorporate clear signals and adaptation pathways for resilient infrastructure, safeguarded communities, metrics, and identification of protected

ecosystems for climate resilience. Plan development will require close consultations with communities vulnerable to climate impacts.

## Loss and Damage

The US is committed to addressing loss and damage from climate impacts domestically and internationally. Addressing loss and damage through the lens of climate justice involves acknowledging and rectifying the disproportionate impacts of climate change on marginalized communities that face the greatest harms. These communities typically face the greatest environmental risks and are least equipped financially and structurally to manage and recover from these impacts.[lxxviii] The US' responsibility will move beyond acknowledgment to active compensation and systemic restructuring to mitigate these injustices.

### *Domestic Initiatives*

Weather and climate disasters cost the United States nearly $100 billion in 2023 after a record number of events. Many of these costs are already attributable to climate change.[lxxix] Increasing and worsening disasters are one of the many climate impacts already being felt in the United States that is likely to worsen. Additionally, slow-onset events such as sea-level rise will begin to make more of an impact over the next decade. The United States is committed to building increased resilience and response capacity to weather and climate events, sudden onset, as well as developing plans for addressing slower onset events in a just manner through a National Loss and Damage Plan that will be prepared in 2027 in concert with the National Adaptation Plan. The US will develop strategies, through broad consultation with affected stakeholders, to address loss and damage within our own borders, focusing on resilience-building; disaster preparedness, relief, and recovery; local cultural cohesion, and preservation; insurance subsidies; and debt cancellation, among others.

The National Loss and Damage plan will present a series of reforms for the Federal Emergency Management Agency (FEMA), ensuring it is fit for purpose in the era of climate change. That will include ensuring heat waves and wildfires are recognized as possible disasters as well as a better way to manage sufficient resources and rapid rehousing. Agencies will also develop a report on anticipated impacts from slow-onset events that includes recommendations on a just and equitable response for impacted communities, with particular attention to how disaster responses can avoid deepening inequality.

### *Implementation of Compensation Mechanisms*

The US will develop compensation mechanisms to directly address the economic hardships caused by climate impacts. Some initial proposals are outlined below and are in consultation with disadvantaged communities.

| Effort | Description |
|---|---|
| Disaster Relief and Recovery Funds | Increasing allocation to these funds specifically for low- |

| | |
|---|---|
| | income and minority communities who often suffer the longest from disasters and have the fewest resources to recover. Ensure that post-disaster funding does not build back status quo fossil fuels but rather long-term resilient, clean, and affordable energy solutions especially in climate-impacted communities. |
| Insurance Subsidies | Offering subsidies for fire and disaster insurance in high-risk areas to make resilience more affordable for the populations in the most vulnerable situations, especially as insurance companies are refusing coverage to disaster prone areas now. |
| Direct Reimbursements | For losses not covered by insurance or FEMA, such as cultural and community landmarks, local ecosystems, and ancestral burial grounds that hold significant non-economic value. |
| Healthcare and Emergency Preparedness | Expand healthcare, other care infrastructure and emergency services in underserved areas to deal with climate-induced health crises and emergencies more effectively. This includes federal, state, and local coordination over all climate-fueled events, especially extreme heat which is the number one weather-related killer. |
| Debt Cancellation | Implement policies to alleviate the financial burdens of climate-impacted communities by canceling or restructuring debt. This would free up resources for these communities to invest in climate resilience and recovery efforts, enhancing their ability to adapt and mitigate the impacts of climate change. |
| US Environmental Damage Fund | The Environmental Damages Fund (EDF) will direct fines and other monetary penalties from environmental offenses into projects that repair and restore the natural environment. It prioritizes actions that benefit the environment in areas where the damage originally occurred, ensuring that funds address local impacts and promote environmental restoration and conservation efforts. |

### *Climate Displaced Persons*

The US will create a category for immigration for people who have been displaced by climate change, called a Climate Displaced Persons Visa. This visa will entitle people to the same resettlement support

as refugees and will admit at least 100,000 people per year or more at the discretion of the President. In the future, this floor will be higher.

## Capacity-Building

Climate action requires efforts from the individual and community to the national and international scales. Acknowledging para. 175 of the Global Stocktake, which recognizes the critical role of Action for Climate Empowerment, it's important nobody is left behind in our collective effort to achieve climate justice.[lxxx] The US will create a national climate education office within NOAA that supports the delivery of skills-building for climate education nationwide. Further, the US will integrate climate science training into all federal positions, ensuring all federal employees understand and can integrate climate resilience into their portfolios. The US will conduct annual listening sessions, including at schools and universities, to ensure climate action and adaptation efforts meet the needs of those most vulnerable. Alongside increased translation and social media efforts to raise awareness of impacts and climate solutions, these actions will ensure US citizens are informed and empowered to act on climate change.

## Transparency

Given that the Fair Share NDC sets goals throughout 2035, the US government will release a report updating progress on each element of the NDC annually. This is to make sure that commitments are being fulfilled and are on track, given the world's ability to stay below the 1.5°C threshold is dependent on the success of implementation of this NDC. This annual report will be paired with an emissions assessment to see if the interventions from this NDC are having the required effect. The report will pay special attention to reporting on carbon and methane emissions from all sectors to prevent additional global warming.

## Fair Share Methodology

The fair shares framework leverages the Climate Equity Reference Project analysis. For an introduction to this framework, and its use in an earlier version of this US fair shares NDC, see 2020's *US Fair Share - Backgrounder*.[lxxxi] In Table 1, there are five equity benchmarks. Benchmark C is the one the US Fair Shares Collaborative chose to apply to develop this US Fair Share Nationally Determined Contribution.

This benchmark begins historical responsibility accounting in 1950, and, on the capacity side, exempts all income below $7,500 a year (in 2005 Purchasing Power Parity dollars) from consideration when calculating countries' capacity. This figure exempts *all* the income of the poorest 70% of the global population – a non-trivial number of whom live in the US – when calculating the US's capacity to pay. Then it scales up the income fraction that counts as international capacity until it reaches a much higher income threshold (about $72,000 a year, in 2010 Market Exchange Rates dollars). This threshold identifies the US population that falls within the richest global 2%.

The fair shares calculator can be found here.[lxxxii] You can use it to see these (and other) equity settings applied to the US, in the context of a projection to 2035. Note that national fair shares, as they are understood in this framework, do not in themselves specify a division between domestic and international action. Instead, the fair shares calculator uses a rubric that can be applied to all countries. Note that in the US case, this does NOT yield the 80% below 2005 domestic reduction used in this NDC. Rather the calculator's indicative domestic emissions reduction estimate is 67% below 2005 levels.

# End Notes

[i] (2023, January 12). *The 2023 Fair Shares Deficit*. Civil Society Equity Review. Retrieved July 15, 2024, from https://static1.squarespace.com/static/620ef5326bbf2d7627553dbf/t/65c6783d23325c064f5e3ff6/1707505728085/COP28_Civil_Society_Equity_Review_Fair_Shares_Report.pdf

[ii] Brady, J. (2024, January 10). *U.S. cut climate pollution in 2023, but not fast enough to limit global warming*. Climate. https://www.npr.org/2024/01/10/1223747804/u-s-cut-climate-pollution-in-2023-but-not-fast-enough-to-limit-global-warming

[iii] See *Fair Share Methodology*, below.

[iv] Calverley, Dan and Kevin Anderson (2022), *Phaseout Pathways for Fossil Fuel Production Within Paris-Compliant Carbon Budgets,* https://research.manchester.ac.uk/en/publications/phaseout-pathways-for-fossil-fuel-production-within-paris-complia; *see also* Civil Society Equity Review, An Equitable Phaseout of Fossil Fuel Extraction (December 2023), https://www.equityreview.org/. An equitable fossil fuel phaseout for the U.S. requires ending all coal production by 2030, and ending all oil and gas production by 2031 for a 66% chance of limiting temperature rise to 1.5°C and by 2034 for a 50% chance.

[v] Ritchie, H. (2019, October 1). *Who has contributed most to global CO2 emissions?* Our World in Data. Retrieved August 19, 2024, from https://ourworldindata.org/contributed-most-global-co2https://www.statista.com/statistics/1224630/cumulative-co2-emissions-united-states-historical/

[vi] See *Fair Shares Methodology*

[vii] The White House (2021, April 22). *FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies*. Briefing Room. Retrieved June 13, 2024, from https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies.

[viii]Friends of the Earth (2021, April). *United States of America Fair Shares Nationally Determined Contribution*. US Fair Share. Retrieved June 13, 2024, from https://foe.org/wp-content/uploads/2021/04/USA_Fair_Shares_NDC.pdf.

[ix] Oxfam, (2023, September 7) *Are G20 Countries Doing Their Fair Share of Global Climate Mitigation?: Comparing ambition and fair shares assessments of G20 countries' Nationally Determined Contributions (NDCs),* Retrieved August 1, 2024, from https://policy-practice.oxfam.org/resources/are-g20-countries-doing-their-fair-share-of-global-climate-mitigation-comparing-621540.

[x] Orvis, R., Gopal, A., & Rissman, J. (2022, December 1). *CLOSING THE EMISSIONS GAP BETWEEN THE IRA AND 2030 U.S. NDC: POLICIES TO MEET THE MOMENT*. Energy Innovation. Retrieved June 13, 2024, from https://energyinnovation.org/wp-content/uploads/2022/12/Closing-The-Emissions-Gap-Between-IRA-And-NDC-Policies-To-Meet-The-Moment.pdf.

[xi] Wolf, Shaye (2023, November). *Out-Polluting Progress: Carbon Emissions From Biden-Approved Fossil Fuel Projects Undermine CO2 Cuts From Inflation Reduction Act.* https://www.biologicaldiversity.org/programs/climate_law_institute/pdfs/Out-Polluting-Progress-Report-2023.pdf

[xii] Farand, C. (2022, November 3). *'Betrayal': US approves just $1bn climate finance for developing countries in 2022*. Climate Home News. Retrieved June 13, 2024, from https://www.climatechangenews.com/2022/03/11/betrayal-us-approves-just-1bn-climate-finance-for-developing-countries-in-2022.

[xiii] United Nations (n.d.). *All About the NDCs*. Climate Action. Retrieved July 12, 2024, from https://www.un.org/en/climatechange/all-about-ndcs

[xiv] United Nations, Convention on Climate Change, Meeting of the Parties to the Paris Agreement. *First Global Stocktake*, 12 Dec. 2023. https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf. Accessed 10 June 2024.

[xv] Harvey, C. (2024, April 24). *UN hopes to hold global temps at 1.5 C. It's unlikely.* E&E News. Retrieved June 4, 2024, from https://www.eenews.net/articles/un-hopes-to-hold-global-temps-at-1-5-c-its-unlikely

[xvi] (2021, August). *Comparability of Effort*. Climate Action Tracker. Retrieved June 10, 2024, from https://climateactiontracker.org/methodology/comparability-of-effort.

[xvii] Shukla, P., Skea, J., & Reisinger, A. (n.d.). *Summary for Policy Makers*. Climate Change 2022 Mitigation of Climate Change. Retrieved August 19, 2024, from https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf

[xviii] (2024, August 9). *Weekly Petroleum Status Report*. Energy Information Administration. Retrieved August 19, 2024, from https://www.eia.gov/petroleum/supply/weekly/pdf/table1.pdf

[xix] SEI, Climate Analytics, E3G, IISD, and UNEP. (2023). The Production Gap: Phasing down or phasing up? Top fossil fuel producers plan even more extraction despite climate promises. Stockholm Environment Institute, Climate Analytics, E3G,

International Institute for Sustainable Development and United Nations Environment Programme. https://doi.org/10.51414/sei2023.050

[xx] Zaidi, F. (2024, March 31). *Is natural gas actually cleaner than coal? Growing evidence says maybe not*. Down to Earth. Retrieved August 19, 2024, from https://www.downtoearth.org.in/climate-change/is-natural-gas-actually-cleaner-than-coal-growing-evidence-says-maybe-not-95295

[xxi] EPA (2024) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022. U.S. Environmental Protection Agency, EPA 430-R-24-004. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-andsinks-1990-2022.

[xxii] United Nations, Convention on Climate Change. *Paris Agreement*. 2015. https://unfccc.int/sites/default/files/english_paris_agreement.pdf. Accessed 10 June 2024.

[xxiii] Environmental Protection Agency. (2024, August 17). *Summary of the Administrative Procedure Act*. Laws and Regulations. https://www.epa.gov/laws-regulations/summary-administrative-procedure-act.

[xxiv] US Department of Justice. (2023, January 18). *Fifth Open Government National Action Plan Issued*. Office of Information Policy. https://www.justice.gov/oip/blog/fifth-open-government-national-action-plan-issued

[xxv] This NDC does not introduce the fair shares framework behind these numbers, though a glimpse of that framework, and some links, is in *Fair Shares Methodology*, below. The key point is that national fair shares are a function of both historical responsibility and capacity to act, and the US has plenty of both. Thus, like other wealthy countries, it has a fair share that is too large to be met solely within its borders. It must act internationally as well, and must do so not only with respect to the mitigation challenge, but also with respect to the global adaptation, loss & damage, and just-transition challenges.

[xxvi] Calverley, Dan and Kevin Anderson (2022, March 22). *Phaseout Pathways for Fossil Fuel Production Within Paris-Compliant Carbon Budgets*., https://research.manchester.ac.uk/en/publications/phaseout-pathways-for-fossil-fuel-production-within-paris-complia;

[xxvii] Center for Biological Diversity, "The President's Emergency Powers" (2022), https://www.biologicaldiversity.org/programs/energy-justice/pdfs/Climate-Emergency-Powers-Report.pdf; Center for Biological Diversity, "The Climate President Action Plan: Legal Authorities" (2019), https://www.climatepresident.org/Legal-Authority-for-Presidential-Climate-Action.pdf; Biden's Climate Powers, https://bidensclimatepowers.org/.

[xxviii] (2013, October 17). *The Tax Break-Down: Intangible Drilling Costs*. Committee for a Responsible Federal Budget. Retrieved August 26, 2024, from https://www.crfb.org/blogs/tax-break-down-intangible-drilling-costs

[xxix] Palmer, B. (2022, July 17). *How Oil Companies Pay Such Low Taxes*. Investopedia. Retrieved August 26, 2024, from https://www.investopedia.com/articles/investing/011216/understanding-how-oil-companies-pay-taxes.asp

[xxx] Su, J., & Golden-Krasner, M. (2022, January 2). The Climate President's Emergency Power. Retrieved July 13, 2024, from https://insideclimatenews.org/news/09032022/carbon-capture-and-storage-fossil-fuels-climate-change/

[xxxi] https://www.biologicaldiversity.org/programs/energy-justice/pdfs/Policy-Brief-for-Positive-Vision.pdf

[xxxii] Crawford, N. C. (2019, November 13). *Pentagon Fuel Use, Climate Change, and the Costs of War*. Watson Institute International and Public Affairs. Retrieved June 10, 2024, from https://watson.brown.edu/costsofwar/files/cow/imce/papers/Pentagon%20Fuel%20Use%2C%20Climate%20Change%20and%20the%20Costs%20of%20War%20Revised%20November%202019%20Crawford.pdf.

[xxxiii] Lorraine, M. (2023, December 12). *'Elephant in the room': The US military's devastating carbon footprint*. Al Jazeera. Retrieved June 10, 2024, from https://www.aljazeera.com/news/2023/12/12/elephant-in-the-room-the-us-militarys-devastating-carbon-footprint.

[xxxiv] Tim, S. (2021, April 27). *The Toxic Legacy of the US Military in the Pacific*. The Nation. Retrieved June 10, 2024, from https://www.thenation.com/article/world/okinawa-poisoning-pacific-jon-mitchell/.

[xxxv] United States Congress (2022, December 1). *Emissions of Carbon Dioxide in the Transportation Sector*. Congressional Budget Office. Retrieved June 10, 2024, from https://www.cbo.gov/publication/58861.

[xxxvi] The Climate and Community Project found that focusing on the built environment and electrified transportation technologies is one of the most important levers for reducing mining-related harm. By decreasing car dependency, right-sizing electric vehicle batteries, and creating a robust battery recycling system, their 2023 report *More Mobility, Less Mining* said, the nation can reduce lithium demand by up to 92% by 2050 compared to the most lithium-intensive scenarios. These types of policies are key to deploying clean energy equitably and minimizing environmental harms.

[xxxvii] Murray, L., Stewart, J., Valencia, M., Hopkinson, L., Reh, W., & Harvey-Scholes, C. `. (2019, April 1). *Progressive Ticket Tax - Frequent Flyer Levy*. Stay Grounded. Retrieved August 19, 2024, from https://stay-grounded.org/wp-content/uploads/2019/04/progressive-ticket-tax-frequent-flyer-levy.pdf

[xxxviii] Vine, D., & Ye, J. (2018, July 1). *Decarbonizing US Industry*. Climate Innovation 2050. Retrieved June 13, 2024, from https://docs.house.gov/meetings/IF/IF18/20190918/109943/HHRG-116-IF18-20190918-SD006.pdf.

[xxxix] Kusnetz, N. (2022, March 9). *Carbon Capture Takes Center Stage, But Is Its Promise an Illusion?* Inside Climate News. Retrieved July 13, 2024, from https://insideclimatenews.org/news/09032022/carbon-capture-and-storage-fossil-fuels-climate-change/

[xl] (2023). *Why the Built Environment*. Architecture 2030. Retrieved June 13, 2024, from https://www.architecture2030.org/why-the-built-environment/.

[xli] Architecture 2030 (2023). *Actions for a Climate Positive Built Environment*. Emissions Impact Hierarchy. Retrieved June 13, 2024, from https://www.architecture2030.org/why-the-built-environment/.

[xlii] CIEL (n.d.) *Fueling Plastics: Fossils, Plastics, and Petrochemical Feedstocks.* https://www.ciel.org/wp-content/uploads/2017/09/Fueling-Plastics-Fossils-Plastics-Petrochemical-Feedstocks.pdf.
[xliii] Noor, D. (2024, April 18) *Plastic-production emissions could triple to one-fifth of Earth's carbon budget- report.* https://www.theguardian.com/us-news/2024/apr/18/plastic-production-emission-climate-crisis.
[xliv] Karali, N., Khanna, N., & Shah, N. (2024). Climate Impact of Primary Plastic Production. *Lawrence Berkeley National Laboratory*. Report #: LBNL-2001585. Retrieved from https://escholarship.org/uc/item/12s624vf
[xlv] WEF (2016, January 19) *The New Plastics Economy: Rethinking the Future of Plastics. https://www.weforum.org/publications/the-new-plastics-economy-rethinking-the-future-of-plastics/*
[xlvi] Karali, N., Khanna, N., & Shah, N. (2024). Climate Impact of Primary Plastic Production. *Lawrence Berkeley National Laboratory*. Report #: LBNL-2001585. Retrieved from https://escholarship.org/uc/item/12s624vf
[xlvii] UNEP (2021, April 7). *NEGLECTED: Environmental Justice Impacts of Marine Litter and Plastic Pollution. https://www.unep.org/resources/report/neglected-environmental-justice-impacts-marine-litter-and-plastic-pollution*
[xlviii] Beyond Plastics and International Pollutants Elimination Network (2023, October). *Chemical Recycling: A Dangerous Deception*. https://www.beyondplastics.org/publications/chemical-recycling.
[xlix] Crippa, M., Solazzo, E., Guizzardi, D. *et al.* (2021, March 8)Food systems are responsible for a third of global anthropogenic GHG emissions. *Nat Food* 2, 198–209. https://doi.org/10.1038/s43016-021-00225-9
[l] Joiner, E., & Toman, M. A. (2023, September 8). *Agricultural Greenhouse Gas Emissions 101*. Resources for the Future. Retrieved July 15, 2024, from https://www.rff.org/publications/explainers/agricultural-greenhouse-gas-emissions-101/
[li] Held, L. (2021, October 6). *Methane From Agriculture Is a Big Problem. We Explain Why.* Civil Eats. Retrieved July 24, 2024, from https://civileats.com/2021/10/06/methane-from-agriculture-is-a-big-problem-we-explain-why
[lii] Anderson, T., & Ron Balsera, M. (2019, December 1). *Principles for a Just Transition in Agriculture*. ActionAid.org. https://actionaid.org/sites/default/files/publications/Principles for a just transition in agriculture_0.pdf
[liii] Coulston, J., Brooks, E., Butler, B., Costanza, J., Walker, D., Domke, G., Caputo, J., Markowski-Lindsay, M., Sass, E., Walters, B., Guo, J. (2023). Forest Resources. In: U.S. Department of Agriculture, Forest Service. 2023. Future of America's Forest and Rangelands: Forest Service 2020 Resources Planning Act Assessment. https://doi.org/10.2737/WO-GTR-102-Chap6
[liv] Environmental Protection Agency (2024, June 5). *Sources of Greenhouse Gas Emissions*. Greenhouse Gas Emissions. Retrieved June 13, 2024, from https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.
[lv] Congressional Research Service (2021, December 16). *U.S. Forest Ownership and Management*. In Focus. Retrieved July 7, 2024, from https://sgp.fas.org/crs/misc/IF12001.pdf
[lvi] Kim, M. (2023, June 26). *Forests Are Losing Their Ability to Hold Carbon*. SciAm. Retrieved July 7, 2024, from https://www.scientificamerican.com/article/forests-are-losing-their-ability-to-hold-carbon/
[lvii] Koberstein, P., & Applegate, J. (2019, May 23). *Tall and old or dense and young: Which kind of forest is better for the climate?* Mongabay. Retrieved July 7, 2024, from https://news.mongabay.com/2019/05/tall-and-old-or-dense-and-young-which-kind-of-forest-is-better-for-the-climate/
[lviii] United Nations (n.d.). *5 Reasons You should Care about Our Ocean*. Department of Economic and Social Affairs. Retrieved August 19, 2024, from https://www.un.org/en/desa/5-reasons-you-should-care-about-our-ocean
[lix] EPA (2023, May 23). *Research on Emissions from U.S. Reservoirs*. Environmental Protection Agency. Retrieved August 19, 2024, from https://www.epa.gov/air-research/research-emissions-us-reservoirs
[lx] Rosentreter, Judith A., Alberto V. Borges, Bridget R. Deemer, Meredith A. Holgerson, Shaoda Liu, Chunlin Song, John Melack, et al. (2021, April) *Half of Global Methane Emissions Come from Highly Variable Aquatic Ecosystem Sources.* Nature Geoscience 14, no. 4: 225–30. https://rdcu.be/ctV5K
[lxi] Delwiche, K. B., Harrison, J. A., Maasakkers, J. D., Sulprizio, M. P., Worden, J., Jacob, D. J., & Sunderland, E. M. (2022). *Estimating driver and pathways for hydroelectric reservoir methane emissions using a new mechanistic model.* Journal of Geophysical Research: Biogeosciences, 127, e2022JG006908. https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2022JG006908
[lxii] https://unfccc.int/topics/climate-finance/the-big-picture/climate-finance-in-the-negotiations
[lxiii]Wells, E. (2024, July 27) *Yellen Says $3T of Fresh Capital is Needed Annually to Fight Climate Change.* https://www.politico.com/news/2024/07/27/yellen-amazon-climate-change-00171522
[lxiv] See for example https://womengenderclimate.org/its-time-for-wealthy-countries-to-payup
[lxv] For example https://unfccc.int/documents/640343
[lxvi] Climate Action Network International (2024, August 5). *Climate Action Network (CAN) submission to the UNFCCC on the New Collective Quantified Goal (NCQG).* https://climatenetwork.org/wp-content/uploads/2024/08/Climate-Action-Network_NCQG_August-2024.docx.pdf
[lxvii] See the appendix (specifically, table 7) of this paper https://doi.org/10.5281/zenodo.2595506. The $14.47 per ton is derived by dividing the $42.6 billion total financing of the GCF portfolio projects (only mitigation and crosscutting projects; adaptation projects have been filtered out) by the expected lifetime emissions reduction for these projects of 2.9 billion metric tons of carbon dioxide equivalents.
[lxviii]Literature review found in Climate Action Network Interantional's Submission on the New Collective Quantified Goal, August 2024 (Climate Action Network_NCQG_August 2024.docx (climatenetwork.org)) Based largely on Markandya and Gonzalez-Equino (2019) on loss and damage and UNEP Adaptation Gap Report (2023) for adaptation.

[lxix] Statista. *Global military spending from 2001 to 2023.* Accessed July 2024. https://www.statista.com/statistics/264434/trend-of-global-military-spending/
[lxx] Legislation has been proposed in Congress that targets oil and gas companies, such as the Big Oil Profiteers Act, [2022-08-12] Wyden Unveils Taxing Big Oil Profiteers Act | The United States Senate Committee on Finance. It will be necessary to also tax pollution-linked profits of other sectors that drive carbon pollution, such as vehicles and construction, in order to raise revenue while maintaining a strong investment to invest in low-emission products.
[lxxi] (2024, April 29) *The Climate Damages Tax: A guide to what it is and how it works*. https://us.boell.org/en/2024/04/29/climate-damages-tax
[lxxii] (2024, June) *A Practical Prescription for Taxing Our World's Richest,* https://inequality.org/great-divide/a-practical-prescription-for-taxing-our-worlds-richest/
[lxxiii] And see *Countries can raise $2 trillion by copying Spain's wealth tax,* https://taxjustice.net/press/countries-can-raise-2-trillion-by-copying-spains-wealth-tax-study-finds/
[lxxiv] See *All eyes on the final round of UNTC Terms of Reference negotiations: insights from 103 submissions,* https://cesr.org/all-eyes-on-the-final-round-of-untc-terms-of-reference-negotiations-insights-from-103-submissions/
[lxxv] (2024, July 25) *G20 agree to work on Brazil's 'billionaire tax' idea, implementation seen difficult,* https://www.reuters.com/business/finance/brazils-billionaire-tax-idea-well-received-g20-seen-difficult-implement-2024-07-25/
[lxxvi] Wasley, E., T.A. Dahl, C.F. Simpson, L.W. Fischer, J.F. Helgeson, M.A. Kenney, A. Parris, A.R. Siders, E. Tate, and N. Ulibarri, 2023: Ch. 31. Adaptation. In: *Fifth National Climate Assessment*. Crimmins, A.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, B.C. Stewart, and T.K. Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA. https://doi.org/10.7930/NCA5.2023.CH31
[lxxvii] The White House (2021, October 27). *Biden Administration Releases Agency Climate Adaptation and Resilience Plans from Across Federal Government*. Briefing Room. Retrieved June 13, 2024, from https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/07/fact-sheet-biden-administration-releases-agency-climate-adaptation-and-resilience-plans-from-across-federal-government/.
[lxxviii] (2022, June 8). *Inequality Is Worsening As The Climate Crisis Deepens*. Environmental Justice Foundation. Retrieved July 8, 2024, from https://ejfoundation.org/news-media/inequality-is-worsening-as-climate-crisis-deepens-new-report-2
[lxxix] Smith, A. (2024, January 8). *2023: A historic year of U.S. Billion-dollar weather and climate disasters*. Climate.gov. Retrieved June 13, 2024, from https://www.climate.gov/news-features/blogs/beyond-data/2023-historic-year-us-billion-dollar-weather-and-climate-disasters.
[lxxx] United Nations, Convention on Climate Change, Meeting of the Parties to the Paris Agreement. *First Global Stocktake*, 12 Dec. 2023. https://unfccc.int/sites/default/files/resource/cma2023_L17_adv.pdf. Accessed 10 June 2024.
[lxxxi] (2020, July 17). *The US Fair Share - Backgrounder*. The US Climate Fair Share. Retrieved August 26, 2024, from https://usfairshare.org/backgrounder/
[lxxxii] EcoEquity & Stockholm Environment Institute (n.d.). *Climate Equity Reference Calculator*. Climate Equity Reference Project. Retrieved August 26, 2024, from https://calculator.climateequityreference.org/